

Ferrell Gas  
MO 64081  
Date: 2.6  
Other: 4/16/97

**FINDING OF IMMINENT AND SUBSTANTIAL ENDANGERMENT**

Ferrell Gas Chlorine Cylinder Site  
1206 Southwest Market St, Lee's Summit, MO 64081

Based on the factors outlined below, I have determined that a threat exists to the public health or welfare or the environment at this site/incident. An imminent and substantial endangerment to the public health or welfare or the environment exists because of an actual or threatened release of a hazardous substance at or from the site/incident.

**I. SITE INFORMATION**

Site Name: Ferrell Gas Chlorine Cylinder Site  
Site Number: YB

Site Location: 1206 Southwest Market St  
Lee's Summit, MO 64081

Potentially Responsible Party:

Ferrell Gas Company  
1775 NE Chouteau Trfwy  
Kansas City, MO 64120  
(816) 468-7700

Access: ☐ Restricted ☒ Unrestricted

NPL Status: Not on nor proposed for inclusion to NPL

Removal Start Date: 04/10/97

**II. THREAT TO THE PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT**

A. Site Background (attach ERNS or trip report or provide date of initial notification, name of notifier, amount and substance released. Document identity of property owner, cause of release and interviews, including contact names, addresses, phone numbers):

Request for assistance from Mr. Norm Brown, MDNR, was received by EPA at 1610 hrs, April 10, 1997 (see attached ERNS report #04107-DH-1610).



A leaking chlorine gas cylinder was abandoned on Ferrell Gas' property at the address mentioned above. Representatives from the company indicated the cylinder was abandoned by an unknown party and that the company does not produce/distribute chlorine products and did not have the expertise to safely handle or dispose of the cylinder. EPA OSC spoke with the following company representatives during the incident:

Mr. Ross Warnell  
Technical Standards  
and Process Mgr  
(816) 792-6998

Mr. Cliff Slisz  
Manager of Safety  
(816) 792-6920

Mr. David Webb  
Facility Manager  
(816) 356-0415

Mr. James Helgason, MDNR representative, (816) 554-4100 and Mr. Gary Trigg from Lee's Summit Fire Department (816) 251-2350 were on the scene.

B. Hazardous Substances Present (describe container/material - attach drums sheets if available):

A single chlorine gas cylinder (approximately 100 lbs) was abandoned at the site. The cylinder was leaking at the valve assembly and due to its deterioration the release could not be secured. The cylinder did not adhere to industry standards for size and dimension. Due to the unusual dimensions of the cylinder, a standard Class A chlorine kit could not be used by the Lee's Summit Fire Department to secure the cylinder.

C. Nature of Actual or Threatened Release of Hazardous Substance (e.g., drum of unknown materials, leaking drum, unknown material in soil, unlimited site access, etc.):

Mr. Helgason, MDNR's representative, confirmed the chlorine gas release by using ammonia vapors and Drager tubes. In addition, every 3 to 5 seconds a bubble was observed forming around the valve assembly.

The cylinder was located in an unrestricted area near residential properties. The valve assembly on the cylinder had severely deteriorated. Exposure of the leaking chlorine gas to adverse weather conditions could produce a hydrochloric acid solution which would accelerate the deterioration of the valve assembly until it completely failed and a catastrophic release occurred.

Check applicable factors (from 40 CFR 300.415) which were considered in determining the appropriateness of a removal action:

X Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants [300.415(b)(2)(I)].

     Actual or potential contamination of drinking water supplies or sensitive ecosystems [300.415(b)(2)(ii)].

X Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that pose a threat of release [300.415(b)(2)(iii)].

\_\_\_ High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate [300.415(b)(2)(iv)].

X Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released [300.415(b)(2)(v)].

\_\_\_ Threat of fire or explosion [300.415(b)(2)(vi)].

X The availability of other appropriate Federal or State response mechanisms to respond to the release [300.415(b)(2)(vii)].

\_\_\_ Other situations or factors that may pose threats to the public health or welfare or the environment [300.415(b)(viii)].

**III. SELECTED REMOVAL ACTION** (attach POLREPS, ERCS delivery order or describe disposal arrangements, treatment, identification of hazardous substances, security arrangements, etc.)

Due to the proximity to residential properties, the EPA OSC directed that the cylinder be removed from the site. The Lee's Summit Fire Department placed the cylinder in an overpack drum and the OSC transported it to a secure EPA facility.

On 4/11/97, Mr. Jack Ahern of the Chlorine Institute, (202) 872-4723, was contacted for assistance. Mr. Ahern recommended contacting Vulcan Chemical Company which is the regional representative to the Chlorine Institute. Mr. Tracy Winter from Vulcan Chemical Company, (316) 529-7216, provided the name for a response contractor his company uses for chlorine releases. Mr. Winter highly recommended the contractor due to the nonstandard dimensions of the cylinder and the potential for an ongoing release since the cylinder was not secure in an appropriate recovery vessel.

Environmental Management Inc. (EMI), from Guthrie, OK, was selected as the response contractor for this incident. EMI is the Chlorine Institute's response contractor for this region of the country. EMI has the technical expertise and specialized equipment necessary to recover and dispose of chlorine cylinders of various sizes and dimensions.

EMI mobilized on 4/11/97 to Dodge Warehouse in Kansas City where the cylinder was secured by the OSC. The cylinder was placed in a recovery vessel and transported to EMI's facility in Guthrie, OK for disposal.

#### IV. ESTIMATED COSTS

##### Extramural Costs

Regional Removal Allowance Costs	\$ 6,000
Contingency 10%	<u>600</u>
Subtotal, Extramural Costs	\$ 6,600

##### Intramural Costs

Direct	\$ 1,600
Indirect	<u>3,320</u>
Subtotal, Intramural Costs	\$ 4,920

TOTAL, REMOVAL PROJECT CEILING	<u>\$ 11,520</u>
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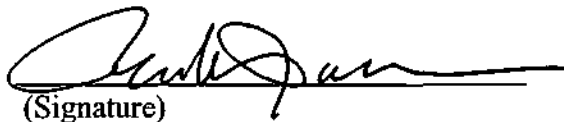
This finding of imminent and substantial endangerment has been entered into the site or incident's administrative record.

  
(Signature)

James E. Augustyn  
(Typed/Printed Name)

U.S. EPA, On-Scene Coordinator  
(Title)

4/16/97  
(Date)

  
(Signature)

Robert W. Jackson  
(Typed/Printed Name)

Chief, ER&R Branch  
(Title)

4-16-97  
(Date)

## ERNS INCIDENT NOTIFICATION REPORT

Regional Case Number: 04107-DH-1610

Reported (mm/dd/yy): 7/10/97	Time (HH/MM): 1610	Multiple Report: <input type="checkbox"/>	Regional Time (HH/MM): 1610
Recorded By: <i>Monahan</i>	Multiple Regional Case Number: _____		
Through NRC: <input type="checkbox"/>	NRC Case Number: _____	SSI Report: <input type="checkbox"/>	CR Number: _____

A. REPORTER *Privacy Act	Confidentiality Requested: <input type="checkbox"/>	Reported By: <i>Monahan</i>
	Organization Name: <i>MONR Johnson Bay Monahan</i>	
Organization (Check One): <input type="checkbox"/> Discharger <input type="checkbox"/> Public <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Unknown		

*Address		Phone: (503) 634-2436 ext. _____	
City	County	State	Zip

B. DISCHARGER	Same As A: <input type="checkbox"/>	Organization (Check One): <input type="checkbox"/> Private Co <input type="checkbox"/> Public <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Unknown	
Discharger Name: <i>Vol. chlorine cylinder dumped on</i>		Phone: ( ) ext. _____	
Contact Name: <i>Fernal Bay Property</i>		2nd Phone: ( ) ext. _____	
Address		Facility ID Number: _____	
City	County	State	Zip

C. INCIDENT LOCATION	Same As A: <input type="checkbox"/>	Street or Approx. Location: <i>1206 Southwest Market Highway 291</i>	
	Same As B: <input type="checkbox"/>	<i>On Fernal Bay Property</i>	
City: <i>Lee Summit</i>	County	State: <i>Mo</i>	Zip: _____ Milepost: _____

D. DATE	Discovery Date (mm/dd/yy): _____	Spill Date (mm/dd/yy): _____	Spill Time (HH/MM): _____
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E. MATERIAL	Material Type: (Check One) <input type="checkbox"/> Unknown <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Haz Sub <input type="checkbox"/> Other					
Material Name	CHRIS	CAS No.	UN DOT No.	Quantity	Units (Circle One)	Quantity In Water
1. <i>chlorine</i>					<i>lb bbl drm unk</i> <i>gal ton oth</i>	
2.					<i>lb bbl drm unk</i> <i>gal ton oth</i>	
3.					<i>lb bbl drm unk</i> <i>gal ton oth</i>	

F. SOURCE	Source of Spill: (Check Any) <input type="checkbox"/> Highway <input type="checkbox"/> Railway <input type="checkbox"/> Pipeline <input type="checkbox"/> UST <input type="checkbox"/> Fixed Facility <input type="checkbox"/> Other		
	<input type="checkbox"/> Air Transport <input type="checkbox"/> Vessel <input type="checkbox"/> Offshore <input type="checkbox"/> AST <input type="checkbox"/> Unknown		
Vehicle ID or Carrier No.: _____	Number of Tanks: _____	Tank Capacity: _____	Tank Units: (Circle One) <i>lb bbl drm unk</i> <i>gal ton oth</i>

Source Description: *75 lb chlorine cylinder poor condition currently leaking*

G. MEDIUM	Medium Affected: (Check Any) <input checked="" type="checkbox"/> None <input type="checkbox"/> Land <input type="checkbox"/> Groundwater <input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Air <input type="checkbox"/> Water <input type="checkbox"/> Within Facility <input type="checkbox"/> Unknown

Waterway Affected: \_\_\_\_\_

H. CAUSE	Reported Cause: (Check Any) <input type="checkbox"/> Transportation Accident <input type="checkbox"/> Operational Error <input checked="" type="checkbox"/> Dumping <input type="checkbox"/> Other
	<input type="checkbox"/> Equipment Failure <input type="checkbox"/> Natural Phenomenon <input type="checkbox"/> Unknown

Cause Description: *Explosion dumped, valve in poor condition*

I. DAMAGE	No. of Injuries: _____ <input type="checkbox"/> None	No. of Deaths: _____ <input type="checkbox"/> None	Property Damage > \$50,000: <input type="checkbox"/>
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J. ACTIONS	Evacuation: <input type="checkbox"/>	Response Actions Taken: <i>MONR requests assistance Lee Summit Fire Dept on scene. Dispatched OSC from Ougoupten to investigate</i>
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K. NOTIFIED	Callers Has Notified: (Check Any) <input type="checkbox"/> State/Local <input type="checkbox"/> Discharger <input type="checkbox"/> USCG <input type="checkbox"/> Other <input type="checkbox"/> Unknown
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Agency Name: \_\_\_\_\_

L. COMMENTS	Comments: _____
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	Additional Information (See Reverse Side) <input checked="" type="checkbox"/>
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M. RESPONSE AND EVALUATION	Response Comments: <i>OSC from Ougoupten sent to investigate</i>
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Agency Name	(Check One) <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Discharger <input type="checkbox"/> Federal <input type="checkbox"/> EPA <input type="checkbox"/> Other <input type="checkbox"/> Unknown
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Agency Name	(Check One) <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Discharger <input type="checkbox"/> Federal <input type="checkbox"/> EPA <input type="checkbox"/> Other <input type="checkbox"/> Unknown
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Agency Name	(Check One) <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Discharger <input type="checkbox"/> Federal <input type="checkbox"/> EPA <input type="checkbox"/> Other <input type="checkbox"/> Unknown
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# REGION 7 INCIDENT NOTIFICATION REPORT

Regional Case Number: \_\_\_\_\_

<b>FOLLOW-UP</b>	Update Date: (mm/dd/yy)		Updated By
<b>C. INCIDENT LOCATION</b>	Dun & Bradstreet No.		
<b>F. SOURCE</b>	Source Code:		
<b>G. MEDIUM</b>	Medium Code	Threat Code(s)	
<b>H. CAUSE</b>	Cause Code:		
<b>J. ACTIONS</b>	No. of Persons Evacuated:		
<b>M. RESPONSE AND EVALUATION</b>	Incident Status Code: (Check One) <input checked="" type="checkbox"/> Classic Incident <input type="checkbox"/> Critical Incident <input type="checkbox"/> Non-Critical Incident <input type="checkbox"/> No Further Action <input type="checkbox"/> Remedial Action <input type="checkbox"/> Field Simulation		

Emergency Response Activity Within 24 Hours: ☒ Emergency Response Activity Date: (mm/dd/yy) 04/10/97

Responding OSC: JIM AUGUSTYN

Action Memo Date: (mm/dd/yy)	Action Memo Approved: <input type="checkbox"/>	POLREP Date: (mm/dd/yy)
Release Investigation: <input type="checkbox"/>	On-Scene Monitoring: <input checked="" type="checkbox"/>	Telephone Assistance: <input type="checkbox"/>
TDD No:	Enforcement Activities:	

Other Follow-up Comments:

OSC ARRIVED ON SCENE AT APPROXIMATELY 6:00 PM. JAMES HELGISON FROM MDNR AND GARY TRIGG FROM LEE SUMMIT FIRE DEPT WERE ON SCENE. THE GAS CYLINDER WAS LOCATED IN AN OPEN AREA ADJACENT TO A BUSY STREET AND RESIDENTIAL PROPERTIES. THE OWNERS OF THE PROPERTY CLAIMED THE CYLINDER WAS DUMPED THERE BY AN UNKNOWN PARTY AND THAT THEY DID NOT HAVE THE EXPERTISE TO HANDLE IT. THE LEE SUMMIT F.D. OVERPACKED THE CYLINDER AND THE OSC TRANSPORTED IT BACK TO DODGE WHERE

ENV. MGT INC. A CONTRACTOR FOR THE CHLORINE INSTITUTE HAS BEEN MOBILIZED FROM GUTHRIE, OK TO SECURE THE CYLINDER AND DISPOSE OF ITS CONTENTS

EMI IS SCHEDULED TO ARRIVE ABOUT 1700 HRS, 4/11/97